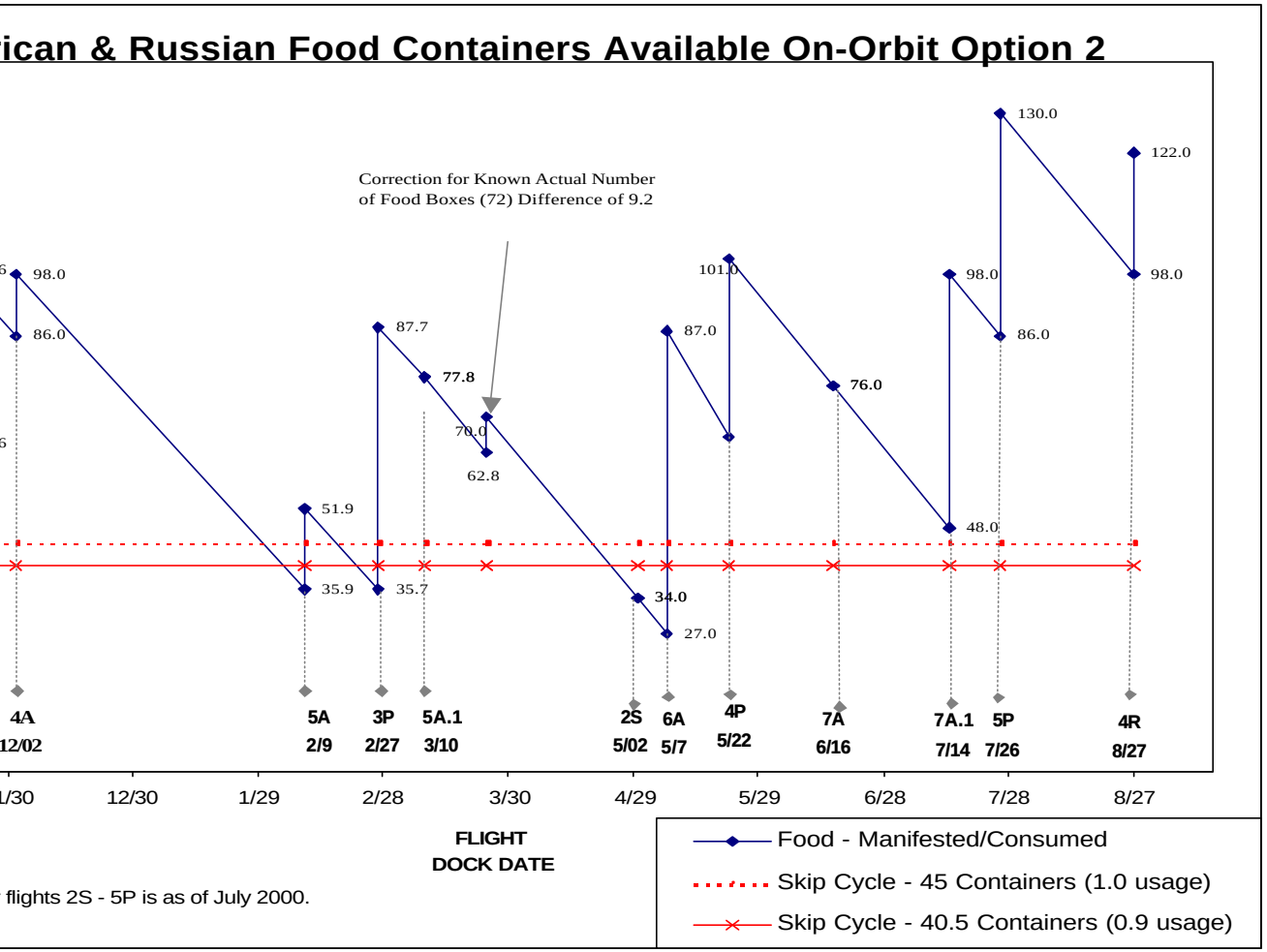
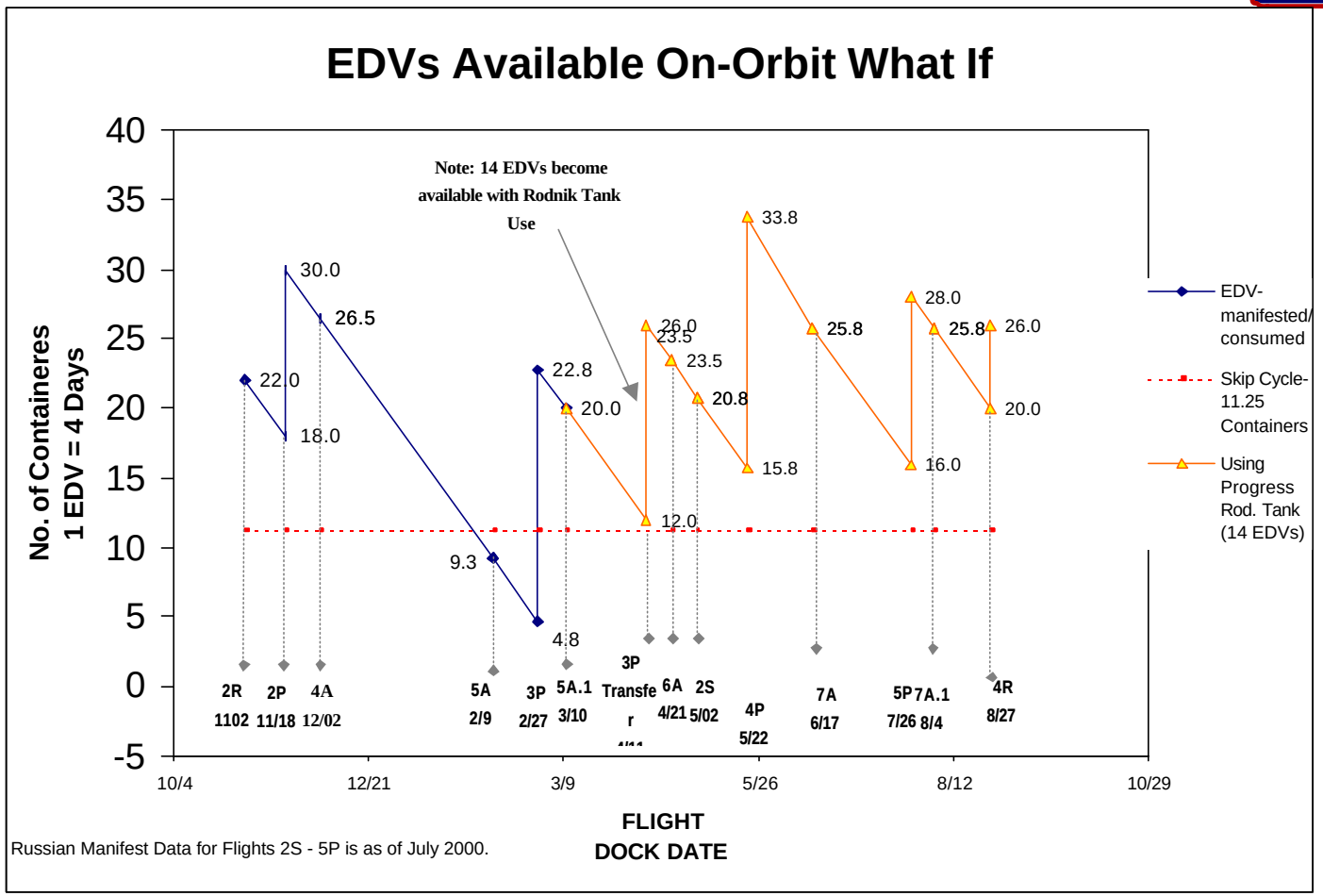
Backup Charts

Mission Overview	**Floyd Booker**
Vehicle Readiness	**Steve Porter**
Program Integration Readiness	**Caris Hatfield**
Avionics/Software Readiness	**Peggy Thomas**
Payloads Readiness	**Rick Nygren**
ISS Configuration Management	**Alan Lindenmoyer**

Food if 6A slips past 2S

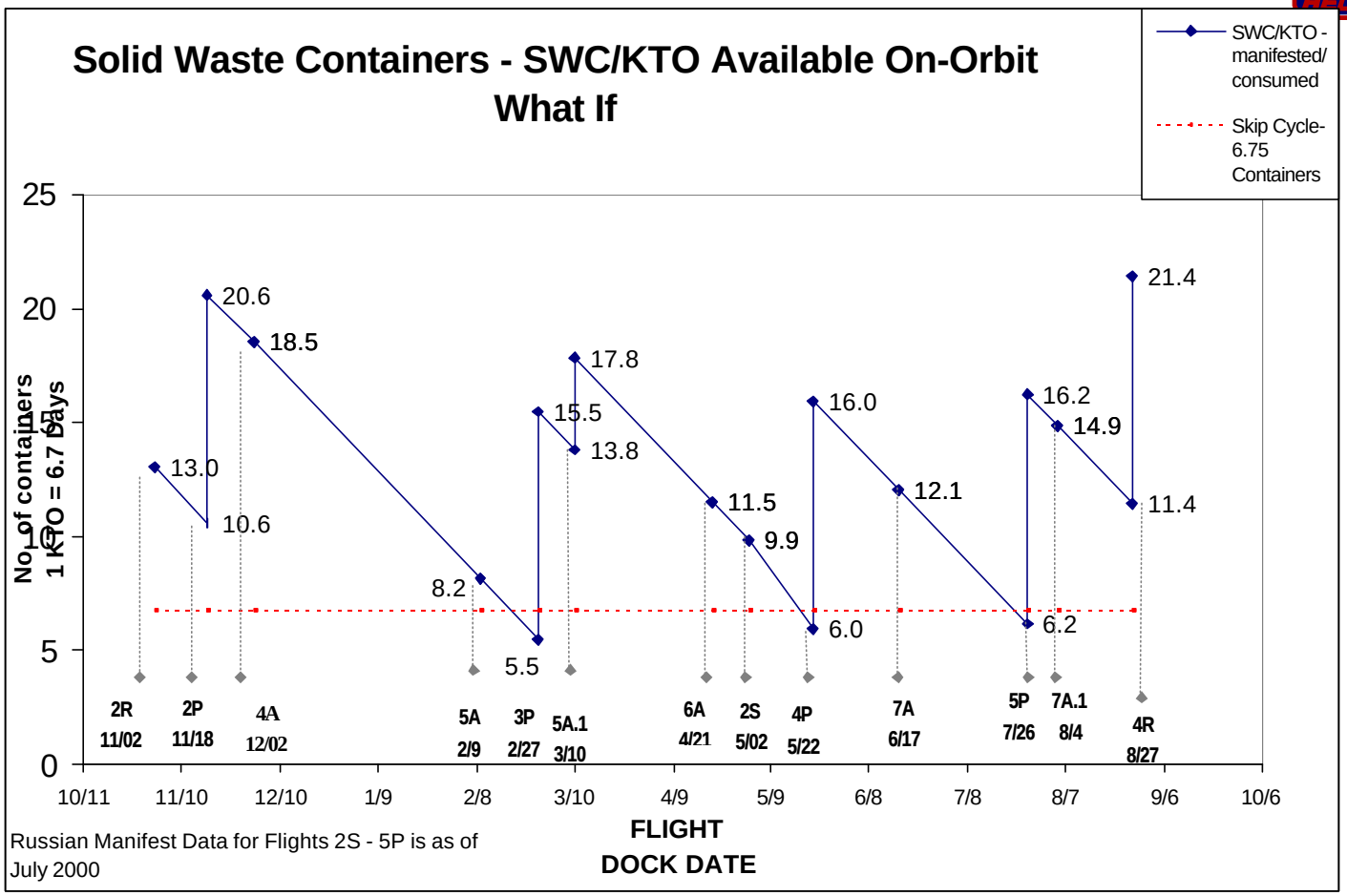


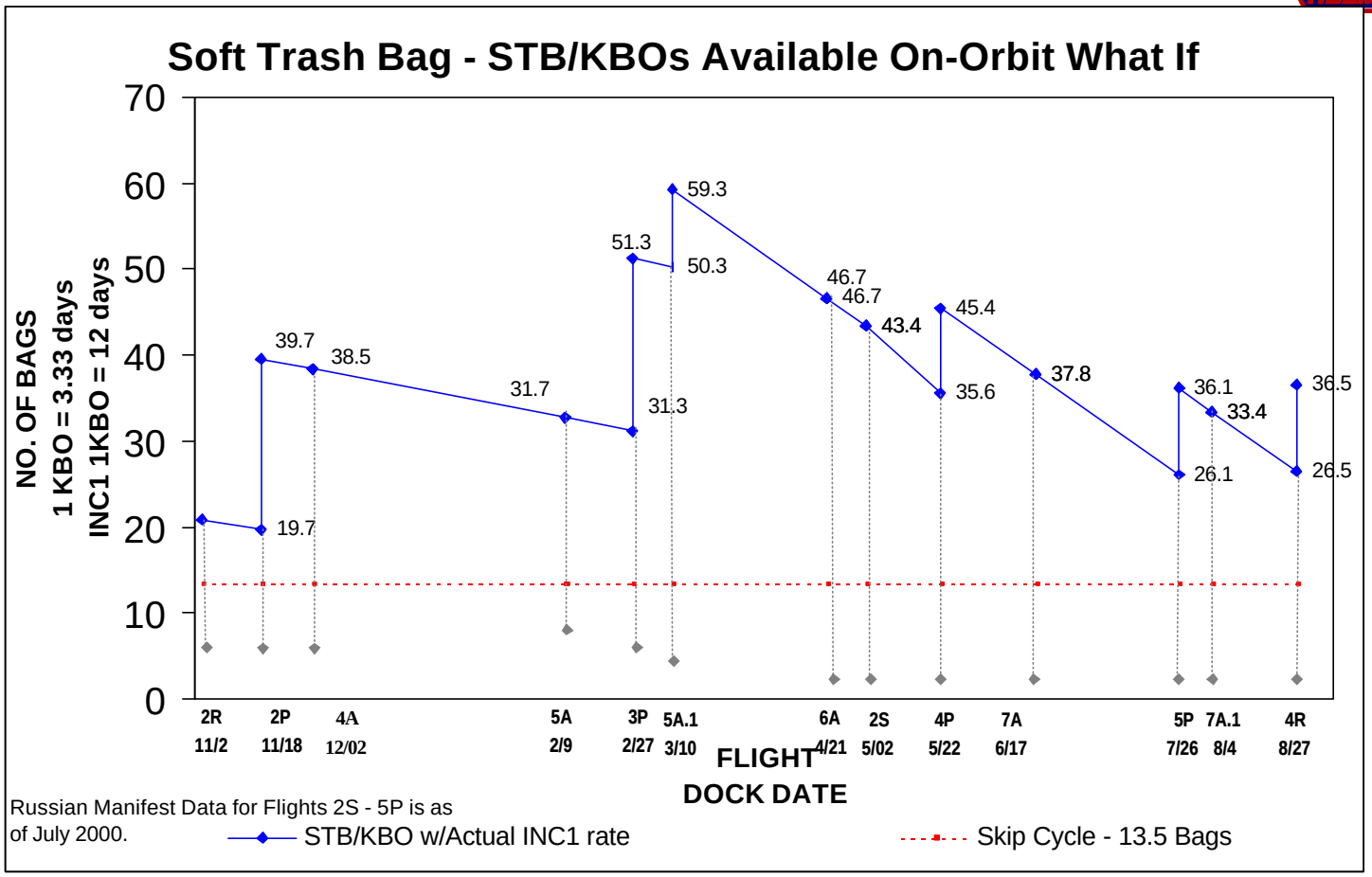


Russian Manifest Data for Flights 2S - 5P is as of July 2000.

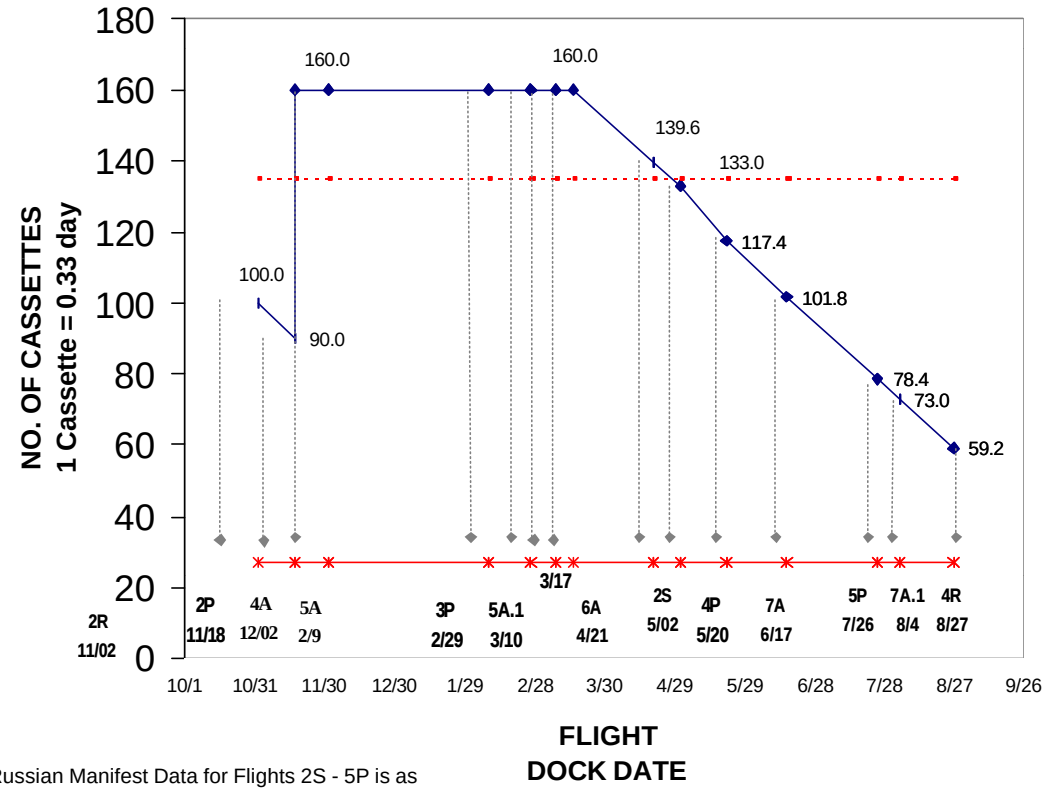

ISS-6A STS-100
ROBOTICS
SCIENCE
LOGISTICS


МКС ISS
УСАЧЕВ
VOSS
HELMS


Solid Waste Containers - SWC/KTO Available On-Orbit
What If
SWC/KTO - manifested/ consumed
Skip Cycle- 6.75 Containers
No. of containers
1 KTO = 6.7 Days
25
20
15
10
5
0
20.6
18.5
13.0
10.6
8.2
5.5
17.8
15.5
13.8
11.5
9.9
6.0
16.0
12.1
6.2
16.2
14.9
21.4
11.4
2R 11/02
2P 11/18
4A 12/02
5A 2/9
3P 2/27
5A.1 3/10
6A 4/21
2S 5/02
4P 5/22
7A 6/17
5P 7/26
7A.1 8/4
4R 8/27
10/11
11/10
12/10
1/9
2/8
3/10
4/9
5/9
6/8
7/8
8/7
9/6
10/6
FLIGHT
DOCK DATE
Russian Manifest Data for Flights 2S - 5P is as of July 2000


Soft Trash Bag - STB/KBOs Available On-Orbit What If
NO. OF BAGS
1 KBO = 3.33 days
INC1 1KBO = 12 days
70
60
50
40
30
20
10
0
59.3
51.3
50.3
46.7
46.7
45.4
43.4
39.7
38.5
37.8
36.1
36.5
33.4
31.7
31.3
35.6
26.1
26.5
19.7
2R 11/2
2P 11/18
4A 12/02
5A 2/9
3P 2/27
5A.1 3/10
6A 4/21
2S 5/02
4P 5/22
7A 6/17
5P 7/26
7A.1 8/4
4R 8/27
FLIGHT
DOCK DATE
Russian Manifest Data for Flights 2S - 5P is as of July 2000.
STB/KBO w/Actual INC1 rate
Skip Cycle - 13.5 Bags

SFOG (Oxygen) Cassettes Available On-Orbit What If



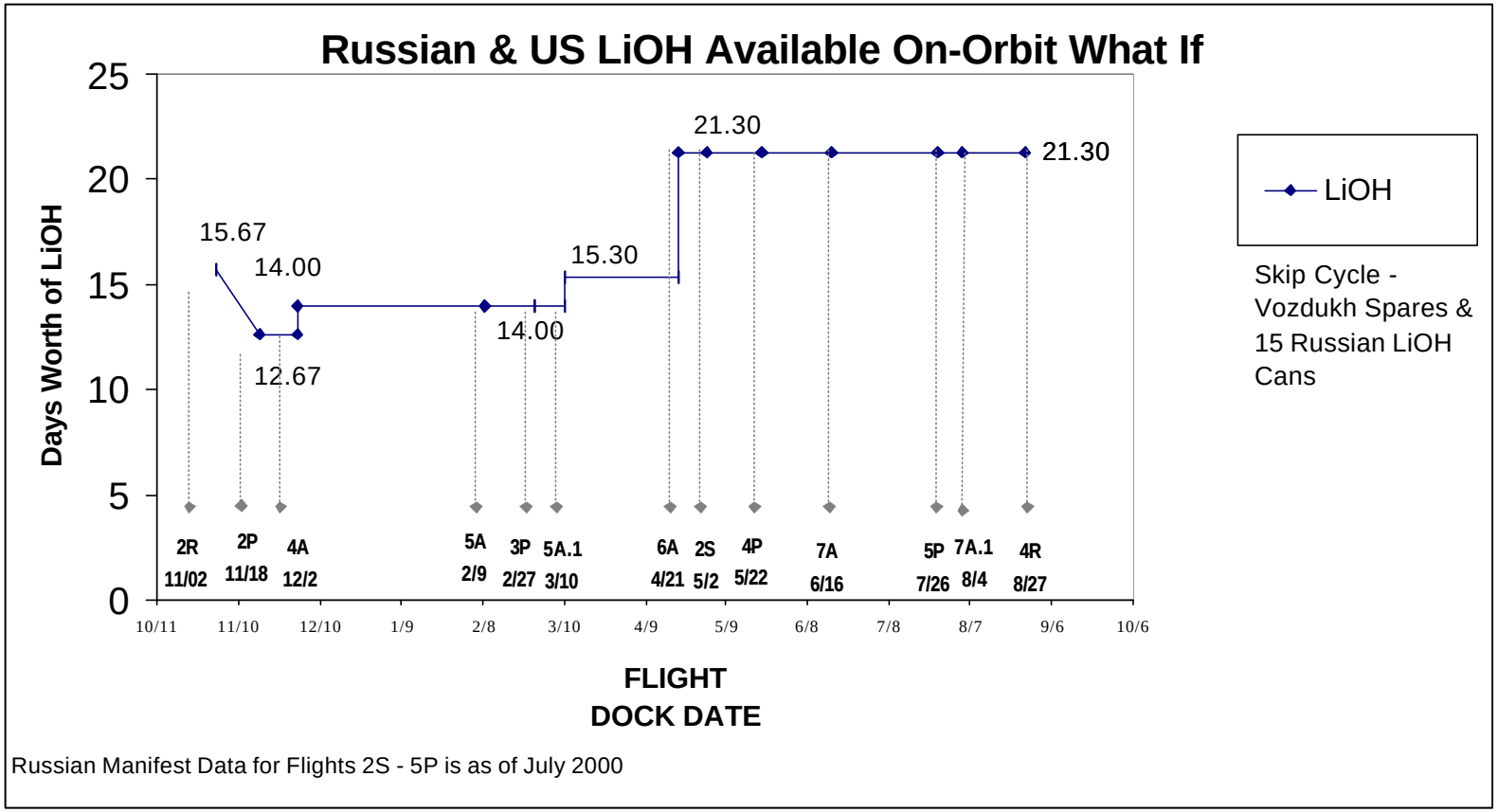
Oxygen - manifested/ consumed

Skip Cycle at full usage (45 days) - 135 Cassettes

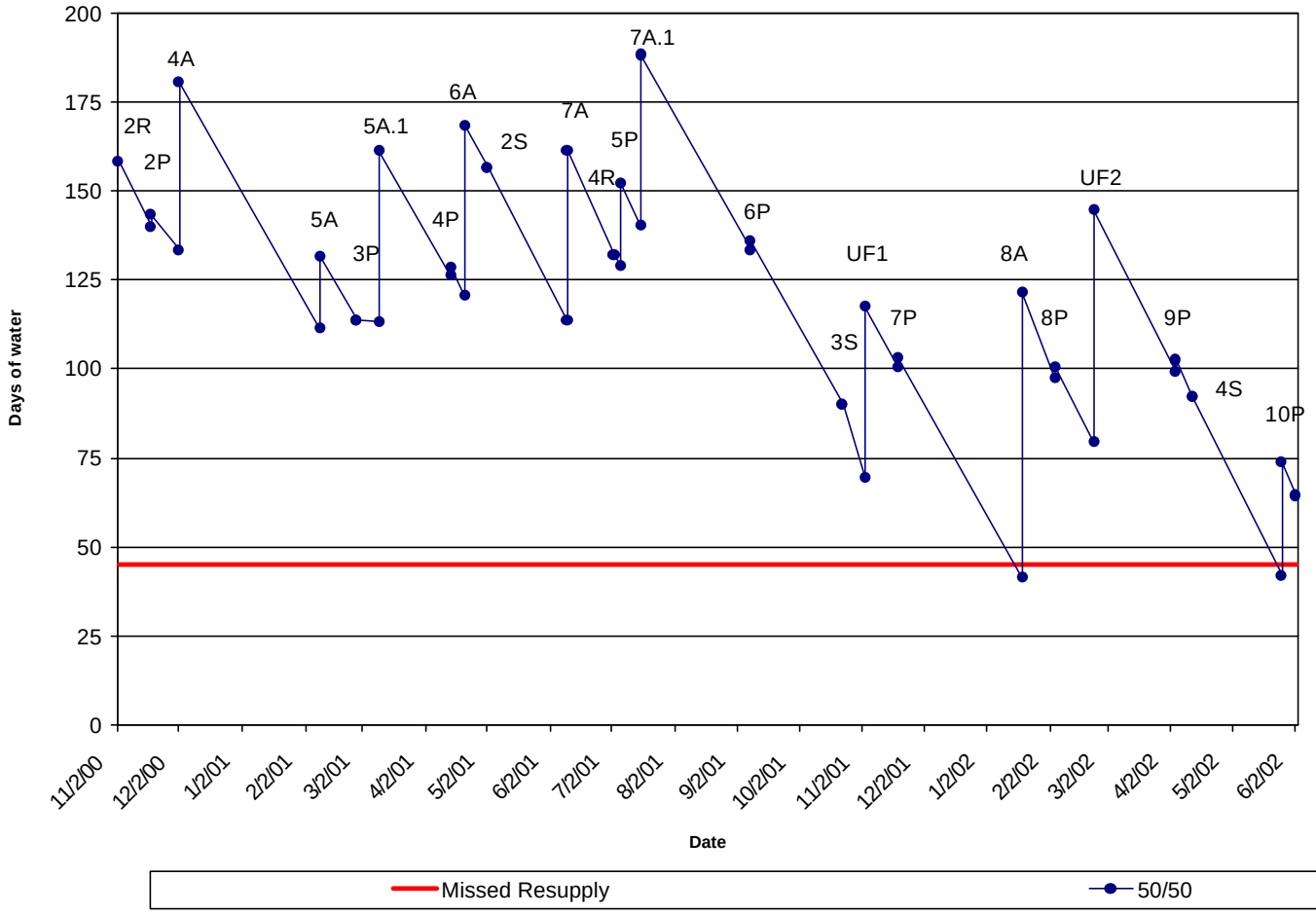
Skip Cycle for maintenance protection (20% of 45 days) - 27 Cassettes

NOTE: Consumed qty/time represents Elektron down for maintenance and/or high beta angles.

Russian Manifest Data for Flights 2S - 5P is as of July 2000


Russian & US LiOH Available On-Orbit What If
Days Worth of LiOH
25
20
15
10
5
0
15.67
14.00
12.67
14.00
15.30
21.30
21.30
2R 11/02
2P 11/18
4A 12/2
5A 2/9
3P 2/27
5A.1 3/10
6A 4/21
2S 5/2
4P 5/22
7A 6/16
5P 7/26
7A.1 8/4
4R 8/27
10/11
11/10
12/10
1/9
2/8
3/10
4/9
5/9
6/8
7/8
8/7
9/6
10/6
FLIGHT
DOCK DATE
LiOH
Skip Cycle - Vozdukh Spares & 15 Russian LiOH Cans
Russian Manifest Data for Flights 2S - 5P is as of July 2000

Days of water on-orbit



Oxygen Component Suspect Contamination

ISSUE:
Precision cleaned hardware has unique Material and Processing packaging, handling, and on-orbit operational Requirements

These requirements are not fully understood by all organizations and the teams that come in contact with this hardware

- Special handling instructions were not passed on to the packing teams
- Packing teams were not consistently informed what hardware was precision cleaned and trained on how to handle that hardware
- In some cases the packing requirements conflict with the teams practices (I.e. Bags are typically removed before flight to prevent packing issues at low cabin pressure)
- Lack of consistent labeling on hardware to identify that it precision cleaned and has unique requirements (I.e “Do Not Remove Cap Before On-orbit Installation”)

Oxygen Component Suspect Contamination

ISSUE:

During the 7A CEIT, high pressure O2 components had been un-bagged and un-capped invalidating the cleanliness levels

–As part of the corrective action, all previous O2 components that had been launched were reviewed for ground handling during bench reviews and packaging (2A.1 through 6A)

6A O2 components were confirmed to have been un-bagged

–Other components are under review

IMPACT:

The following items have been identified by ECLSS as items which are suspect of having possible O2 contamination concerns:

Items on 7A
- Suspect items have been or are in the process of being cleaned

Items manifested in MPLM on 6A
- Medium Press O2 Regulator/Relief Valve part number B41389-1
- Low Press O2 Regulator/Relief Valve part number B41301-3
- EMU Umbilical (qty3) – SV819500-02-01, 02, 03
- ORCA

Items manifested on 5A.1 mid-deck and currently stowed on station
- Low Pressure O2 Jumper 683-13870-10 ---> 683-56836-410
- High Pressure O2 Jumper 683-13870-11 ---> 683-56001-10

Oxygen Component Suspect Contamination

FORWARD WORK:

Screening criteria are being developed to verify cleanliness had been maintained

–Review of closeout photos, discussions with bench review personnel, photos from on-orbit of current configuration

If screening indicates concern, then hardware will be returned on 6A for cleaning

–All hardware can be re-cleaned and prepared for launch on 7A

Corrective action is in work by SR&QA, M&P, KSC Resupply Return IPT and Cargo Integration and Processing to resolve processing issues and disconnects

PCU Plan

BACKUP CHARTS

PCU PLAN

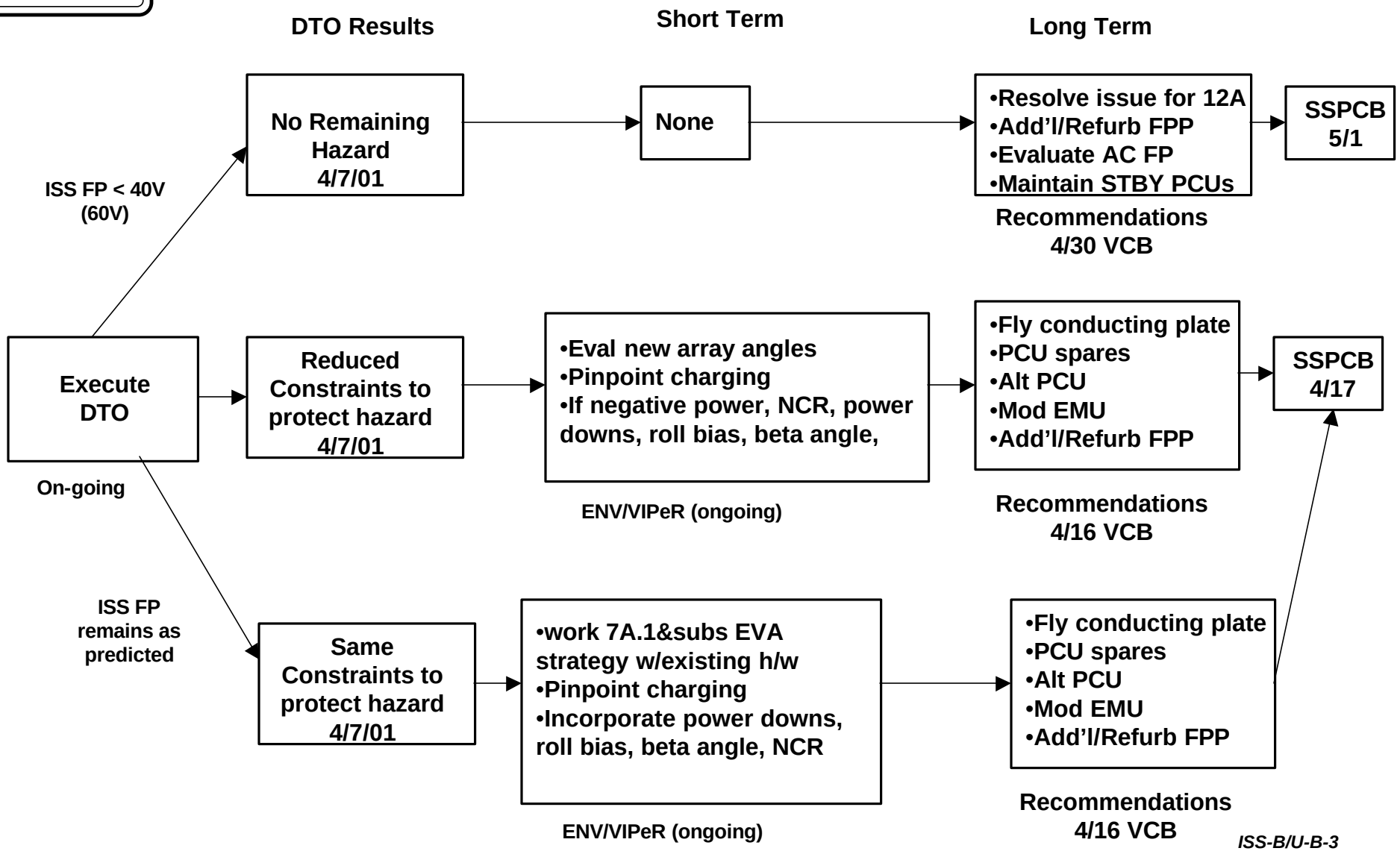
Potential Solutions to Hazard

Operational workarounds to ensure safety of EVA

- SAW Auto-track during EVA for flights beyond 7A
  - One-fault tolerant condition
    - Requires the arrays to be shunted / feathered after detection of first failure to restore fault tolerance
    - If loss-of-signal, on-board C&W detects some PCU failures
  - Resulting exposure to hazard is limited to less than 1/3 of orbit (insolation and arrays-to-ram)
    - Hazard requires both PCUs fail during LOS in a manner not detectable on-board
    - Based on probabilistic assessments, typical conclusions are low probability of two independent failures within such a short period of time
    - During LOS, SAW shunted / feathered to protect for two PCU failures
      - ISS energy balance analysis in work
    - EVA duration is 4 to 5 orbits

PCU PLAN

Resolution Plan

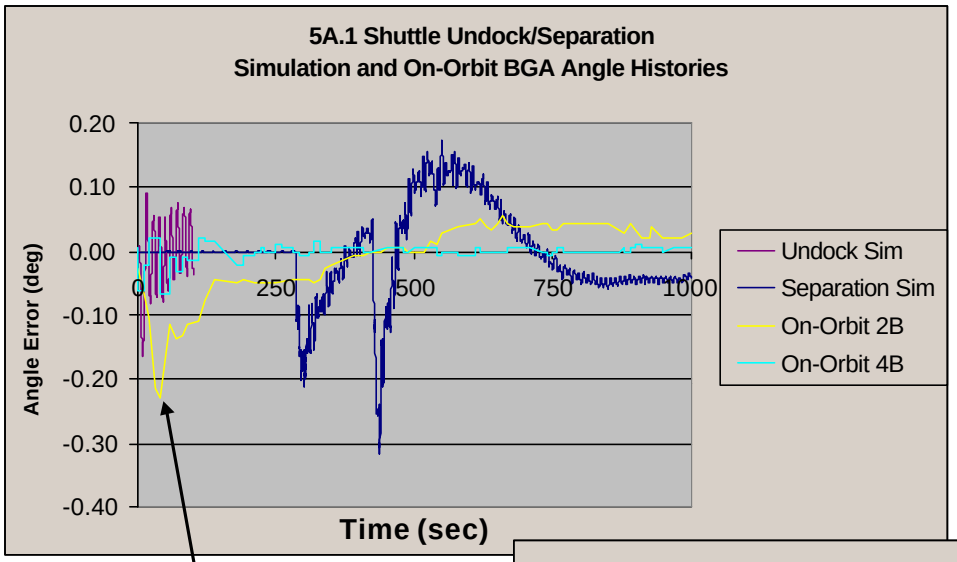


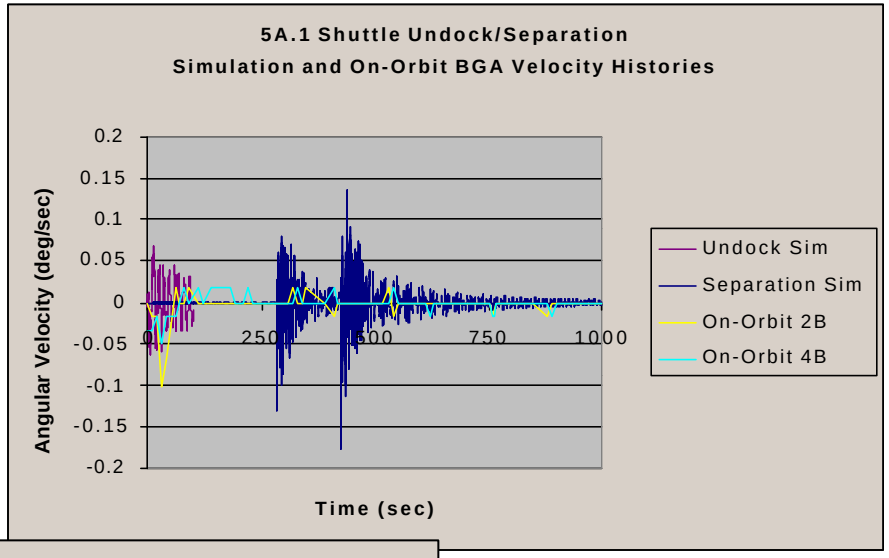
ISS-B/U-B-3

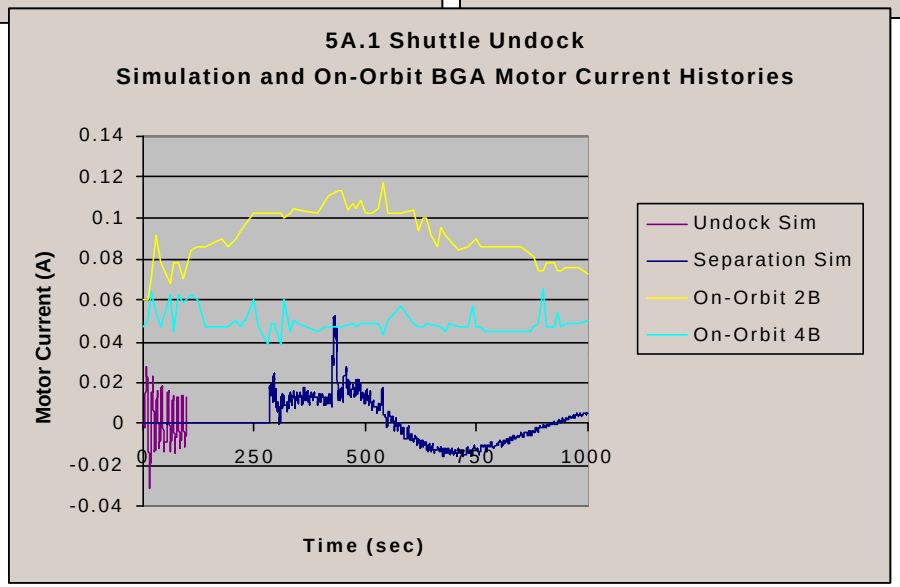
BGA Latch Requirements for 6A Orbiter Approach and Separation

BACKUP CHARTS

BGA Latch Requirements for 6A Orbiter Approach and Separation

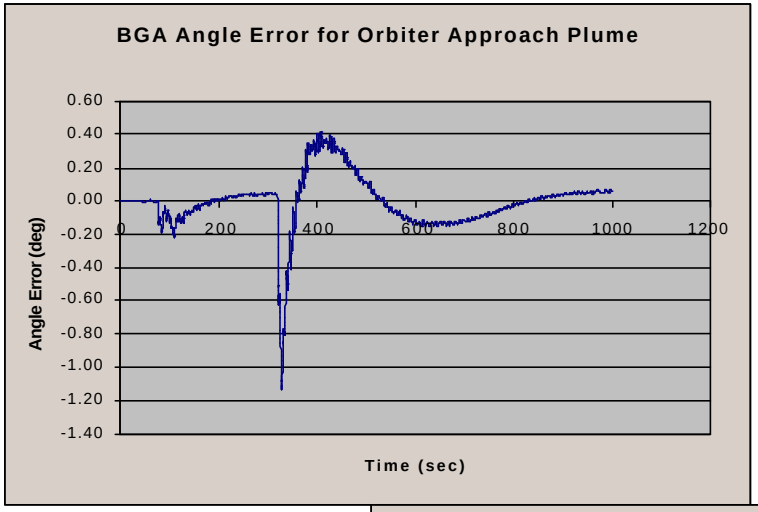


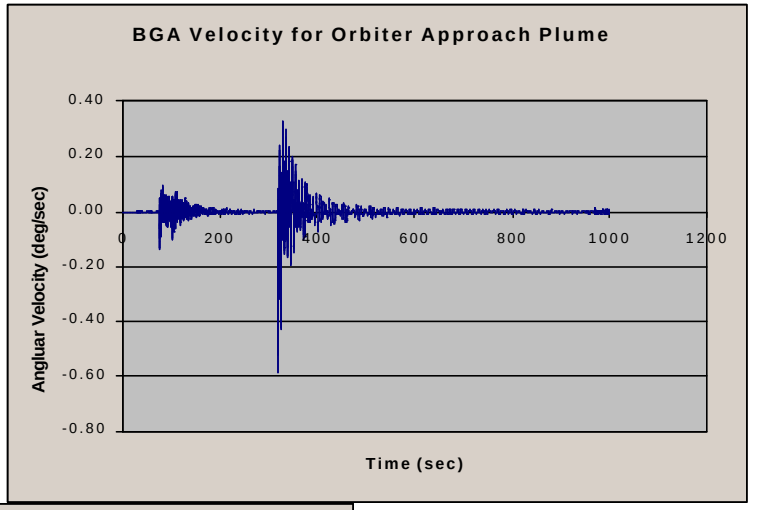


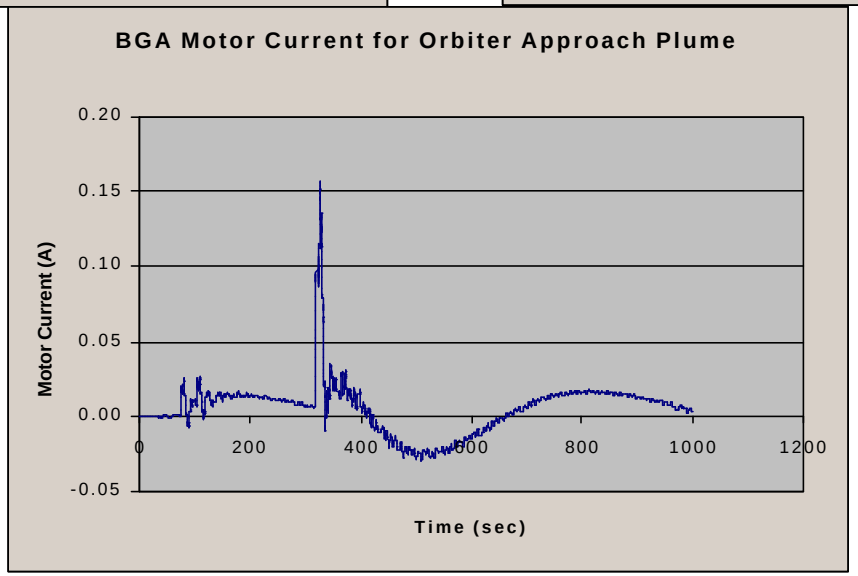


2B behavior possibly due to reflected plume off the stbd EEATCS radiator

BGA Latch Requirements for 6A Orbiter Approach and Separation







BGA Latch Requirements for 6A Orbiter Approach and Separation

Loss of BGA Motor Control

- NCS-PVCU Loss of Comm
  - Preset blind mode to position hold
- PVCU-ECU Loss of Comm
  - Preselect angle hold option
- Inadvertent Command
  - Make 2 step commands except for BGA Motor Off and RPCM Off
- Autonomous FDIR
  - PVCU:
    - 2 deg/sec velocity limit
    - 154F ECU temperature limit
    - 1.4 amp BMRRM motor current limit
    - >1 deg angle error, <0.001 deg/sec velocity, for 3 minutes stall limit
  - ECU:
    - divergence detection: position change > 0.64 deg in 0.32 sec timeslice
- ECU Loss of Power
  - Redundant, but 30 minute minimum recovery
- ECU Card Failure
  - Loss of any one of four printed circuit cards causes unrecoverable loss of motor control

6A Worst Case Approach Loads Assessment

- For 6A Orbiter approach with an unlocked beta gimbal, assess impacts to array and truss structure if array rotates to worst case orientation and is plumed.
- 2-sigma and 3-sigma loads assessed for 257 case 6A Orbiter approach database
  - Arrays oriented to worst case position and locked.
    - 4B = 110 degrees.
    - 2B = 260 degrees.

- All interfaces pass PID load requirements for 3-sigma loads except mast batten axial and beta gimbal torsion
  - If arrays are not locked, the load path that causes these high responses will not exist and the loads will be substantially reduced

BGA Latch Requirements for 6A Orbiter Approach and Separation

- Flight 5A.1 as-flown Orbiter separation
  - Approval was given during Flight 5A.1 to perform Orbiter separation with the BGA in directed position mode (unlocked) with SAWs feathered based on this process
  - The as-flown separation firing history was more benign than the analysis case
    - The initial four pulse group produces negligible direct plume loads
    - No firings occurred after the initial four pulse group
  - Overlays of the controller analysis as-analyzed and as-flown shows reasonable correlation
    - 4B BGA disturbance is caused completely by the Orbiter undocking force and response tracks well to prediction
    - 2B BGA response is out of family
      - Potentially due to reflected plume off the Starboard EEATCS radiator
      - Angle error is still below 0.5 deg

5A.1 Worst Case Sep Loads Assessment

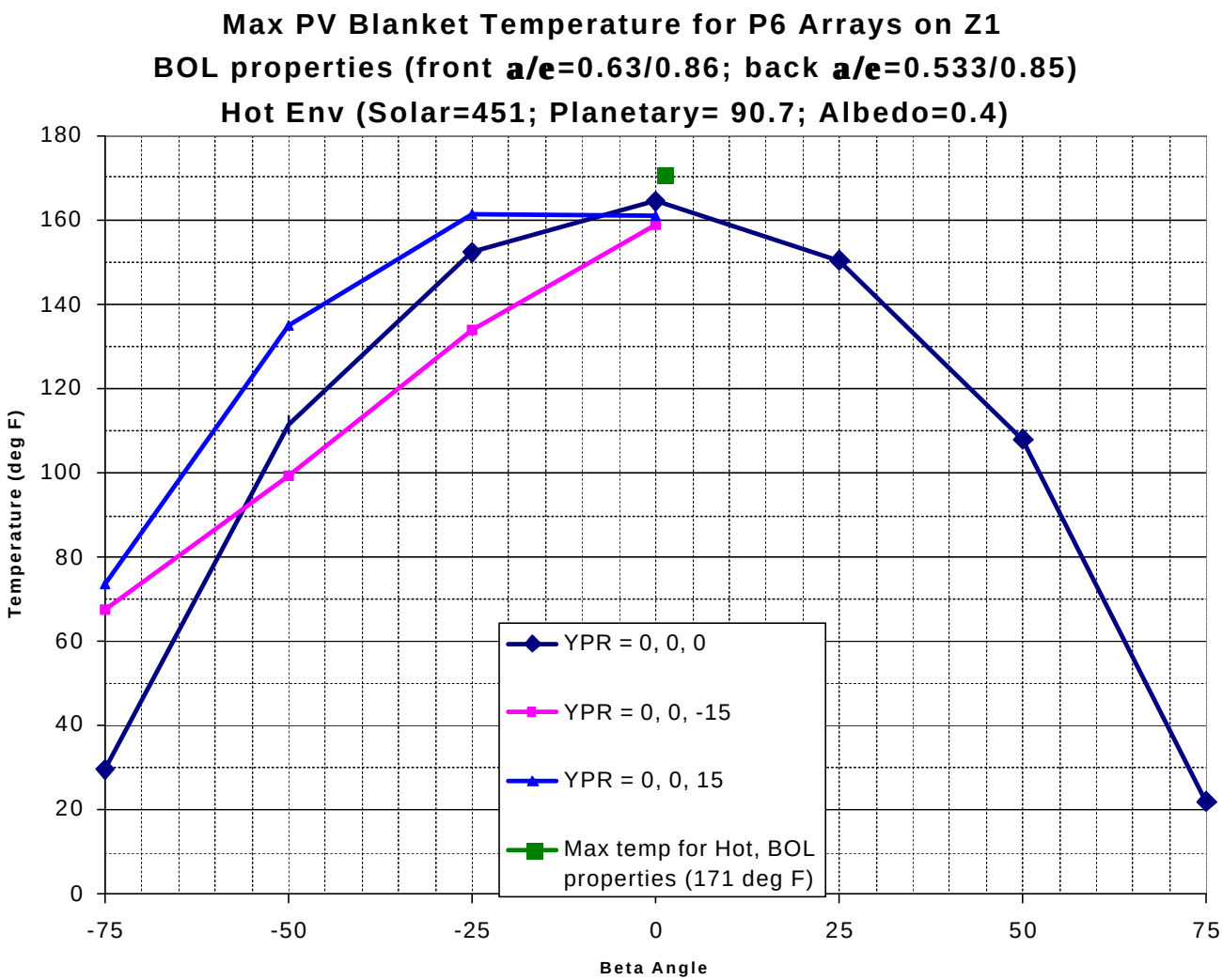
- For 5A.1 separation with an unlocked beta gimbal, assess impacts to array and truss structure if array rotates to worst case orientation and is plumed.
- 2-sigma and 3-sigma loads assessed for 5A.1 separation using old procedure (4 - 160ms Norm-Z firings).
  - Arrays oriented to worst case position and locked.
    - 4B = 110 degrees.
    - 2B = 260 degrees.

- All interfaces pass PID load requirements for 3-sigma loads except beta gimbal torsion (> 6,660 in-#).
  - If arrays are not locked, this load path will not exist.
- Plume loads from new separation procedure are even lower.

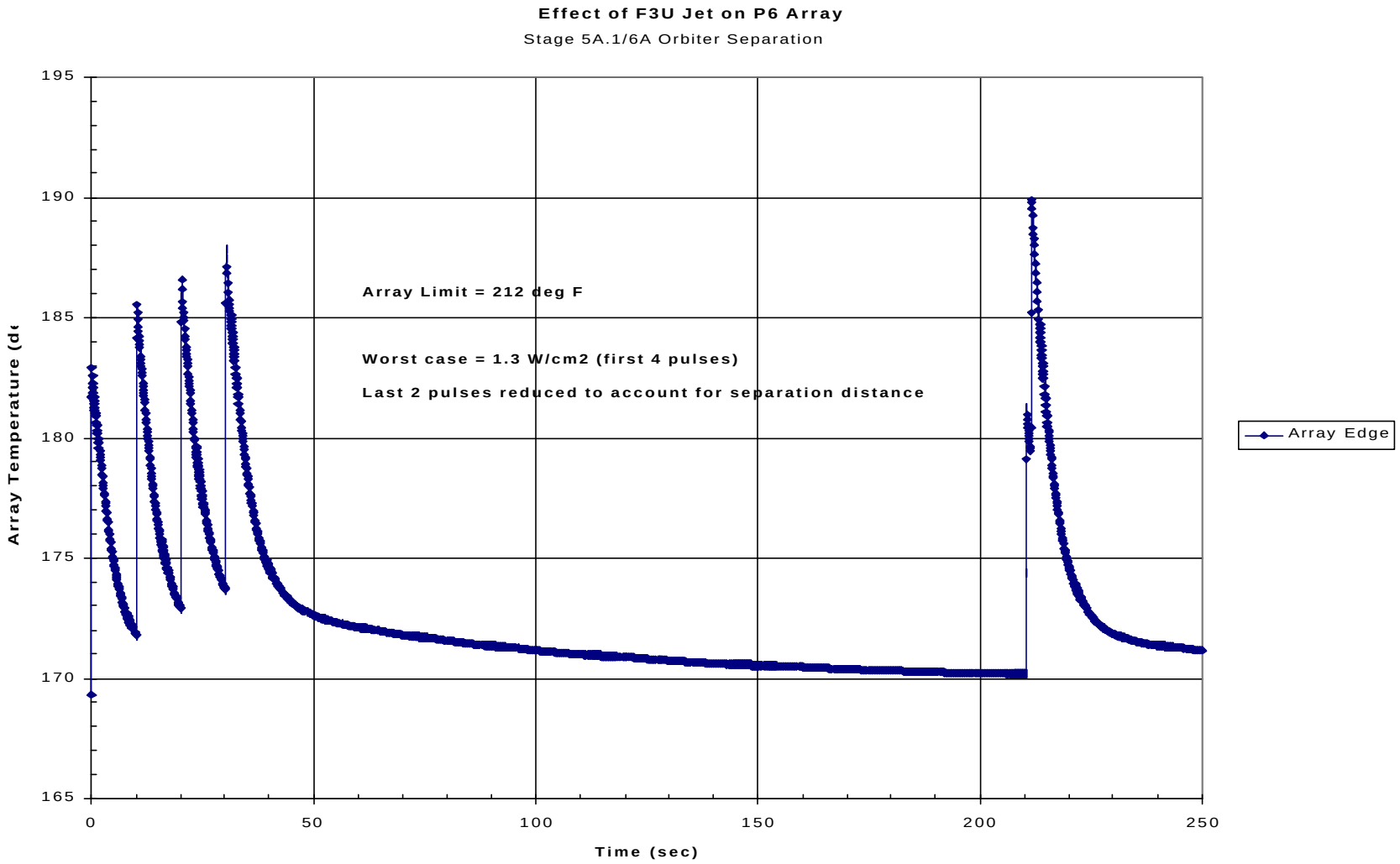
Separation Plume Heating Analysis Assumptions

- Jet Firing History: Four 0.08 sec pulses, with 10 sec intervals, followed by a three minute interval, and then two 0.16 sec pulses with 1 sec interval
  - First set of pulses occur at approximate range of 0 to 5 ft, second set occur at approximately 30 to 75 ft
- Plume heating rate assumptions were coordinated with Forrest Lumpkin / Bill Rochelle, reference VIPER presentation, October 19/2000. (TDS# D8.1.1-5)
- Array temperature limit of 212 deg F
- Updated analysis:
  - Norm Z separation mode (jets F3U, R1U, L1U)
  - Heat rate assumptions
    - zero separation distance for 1st set of pulses (1.3 W/cm2), followed by 30 ft separation distance for 2nd set (0.51 W/cm2)
  - Initial array temperature of 150 degF -- hottest predicted array orbital temperature

P6 Array Temperature Peak Temperatures



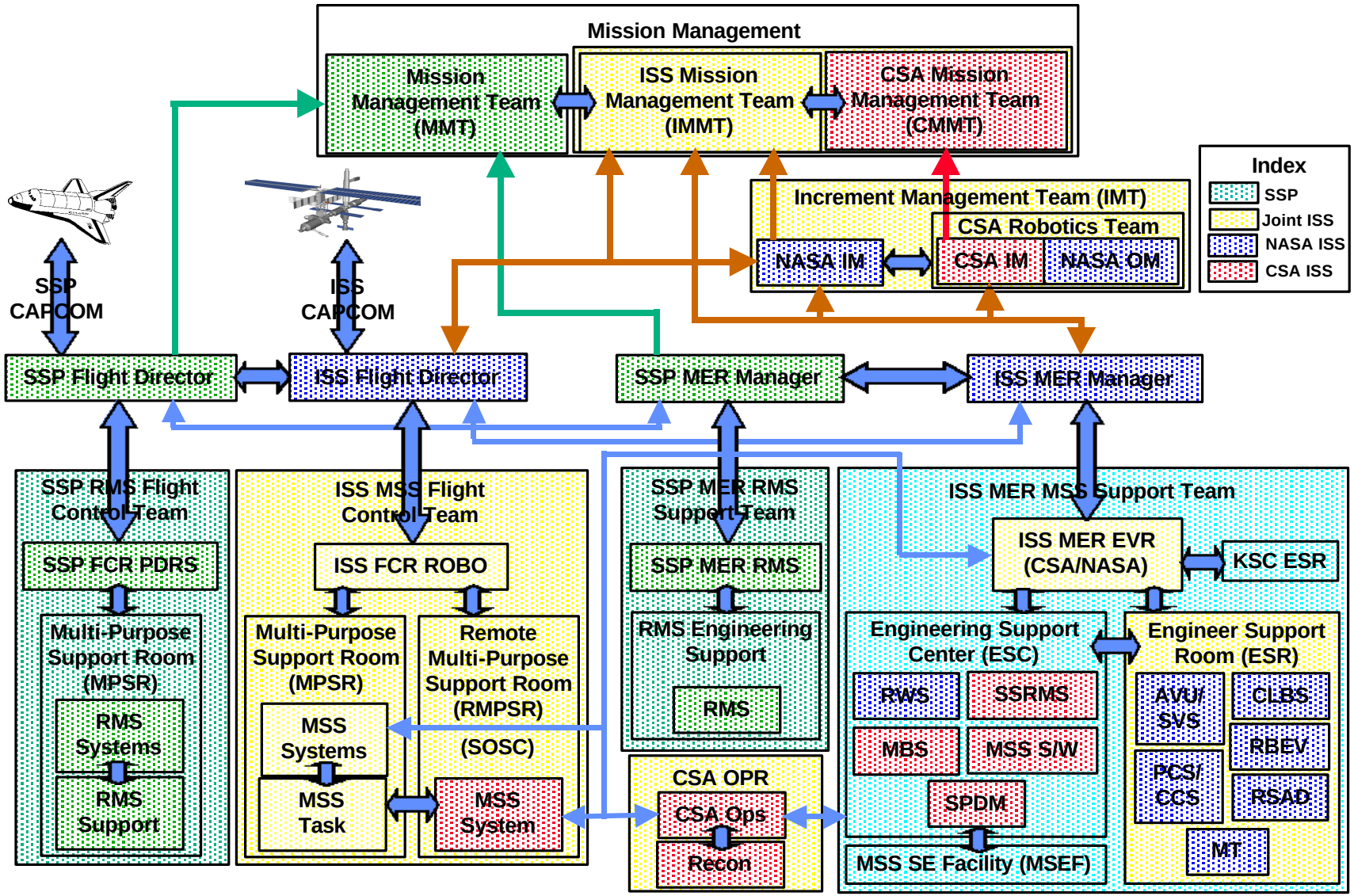
Plume Heating Effect on Feathered Array Accounting for Separation Distance; Orbiter Jets F3U/R1U/L1U



Back-up Charts

Jeff Arend/281-244-7038

MSS Robotics Initial Capability Real-Time Support



Jeff Arend/281-244-7038

Backup

Jeff Arend/281-244-7038

6A RSP183 Design Mass Exceedance Recovery Plan

- Overall 6A MPLM weight is within 96 lbs of VLA mass properties
- RSP 183 is over the RSP mass design limit by 36 lbs.
- How did we get here?
  - RSP was planned to be loaded too close to the RSP design limit.
  - RSP 183 was the Late Load RSP, and the actual mass properties were received the day before MPLM hatch closure.
    - » Plan was to receive mass properties on 3/21, one week prior to hatch closure.
    - » In the future, OM5 is requesting input on Go/No Go for hatch closure.
- Issue Resolution
  - To satisfy CoFR requirements
    - » Re-ran loads with RAPID-1 to characterize loads
    - » Re-ran RSP stress model with revised mass properties and folded M-2 bag fences
    - » Resulted in 2% positive margin using a 1.25 MUF
  - Assigned an action to OX to review impacts to limited life and life-cycle items.

Will reduce max loading of all future RSPs by 25 lbs below the design limit to provide adequate margin for manifest uncertainty growth.

Backup Material

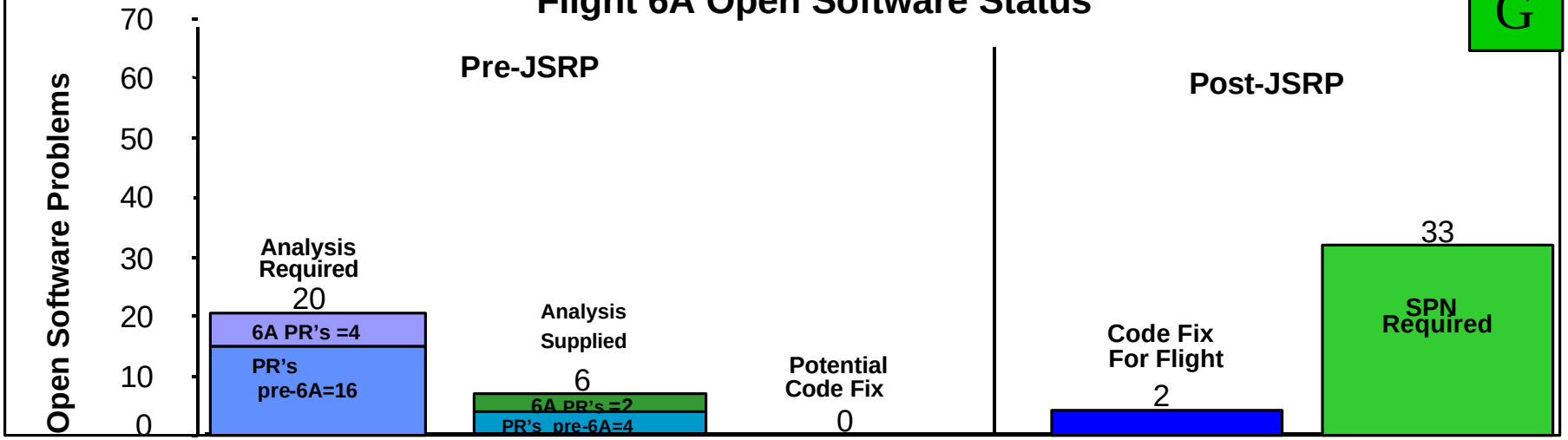
Randy Davis, 6A Flight Software Manager,
Telephone: 281-244-4634

Flight 6A SW Plan to Launch

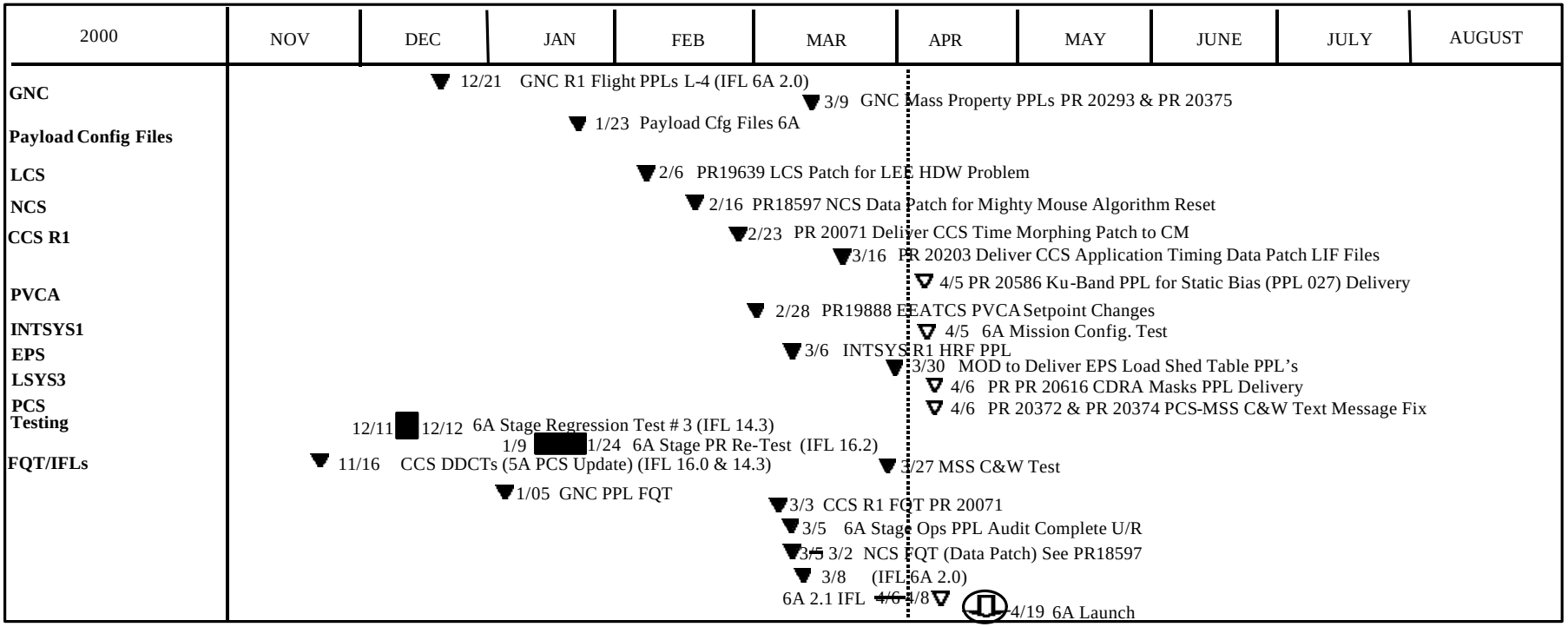
As of 4/2/01

Flight 6A Open Software Status

G



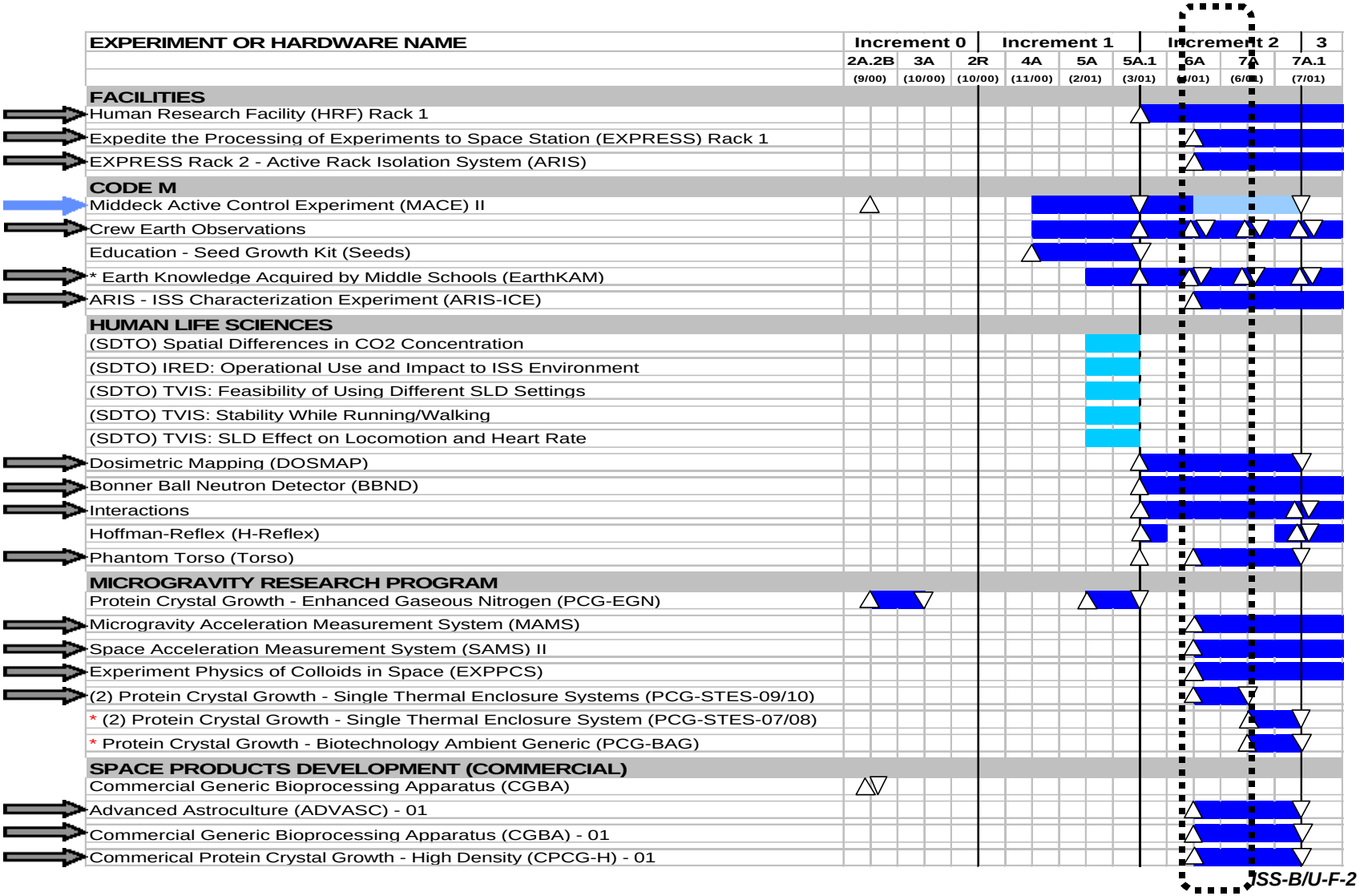
Flight 6A FSW Plan to Launch



BACKUP MATERIAL

- 6A Research Overview
- 6A Payload Exceptions

STS-100/ISS-6A Research Overview



6A Hardware ICD Exceptions

Exception No.	Title	PCB	Status
EXPRESS RACK 1			
57201-NA-0033A	EXPRESS Payloads Crew Loads Exception	3/23/01	Approved OSB
57201-NA-0034	ER1 Video Exception		WITHDRAWN 3/28/01 - Signal source problem
57201-NA-0035	ER1 Subrack Payload (ADVASC) Video Exception	3/27/01	Approved OSB
57201-NA-0014B	EXPRESS Rack 1 Protrusions	1/26/01	Approved OSB
57201-NA-0016	Exception to Maintain Minimum Delta-T for All Flow Regimes	9/6/00	Closed.
57201-NA-0025A	EMI waiver for narrowband emissions and electric field levels	1/10/01	Approved
57201-NA-0027A	ER-1 Acoustics	1/26/01	Approved OSB
57201-NA-0030	EMI Waiver for Radiated Emissions Exceedances (RE02) for all EXPRESS Rack 8/2 Configuration Using EXPRESS Rack Two Test Results	2/6/01	Approved OSB
52003-001A3	CGBA Color	1/26/01	Approved OSB
52003-0033	CGBA Connector Spacing	2/2/01	Approved OSB
52007-0123	CPCG Accidental Actuation	2/2/01	Approved OSB
52007-0143	CPCG Color	1/26/01	Approved OSB
52017-0093	SAMS Toggle Switches	1/26/01	Approved OSB
52018-006A3	PCG-STES Human Factors	2/5/01	Approved OSB
52025-0023	MAMS Toggle Switch Exception	1//25/01	Approved OSB

Notes: 1. Generic exception for all EXPRESS 8/2 Racks
2. This exception also affects HRF
3. Subrack exception

EXPRESS RACKS 1 and 2			
57201-NA-0037	EXPRESS Rack Hose Labeling Exception	4/4/01	OPEN
57201-NA-0031A1	Time constant	3/14/01	APPROVED
57201-NA-0012C1	Ethernet Broadcast from EXPRESS Rack PEHB	10/27/00	Approved
57201-NA-0015B1	Integrated EXPRESS Rack Active Air Exchange	9/6/00	Approved
57201-NA-0017A1	EMI Waiver for Radiated Emissions Exceedances (RE02)	7/5/00	Approved. Superseded by 57201-NA-0030
57201-NA-0018A1	Handle and Restraints for ISS Lockers	11/14/00	PCB Approved on 11/14/00 OSB.
57201-NA-00201	EMI waiver for conducted susceptibility	7/5/00	Approved
57201-NA-0021B1,2	Connector Spacing	10/27/00	Approved
57201-NA-0022B1	EXPRESS Rack Holes/Gaps	1/26/01	Approved OSB
57201-NA-00241,2	Connector Accessibility	10/27/00	Approved
57201-NA-0028A1	Non-captive fasteners	1/26/01	Approved OSB

Notes: 1. Generic exception for all EXPRESS 8/2 Racks
2. This exception also affects HRF

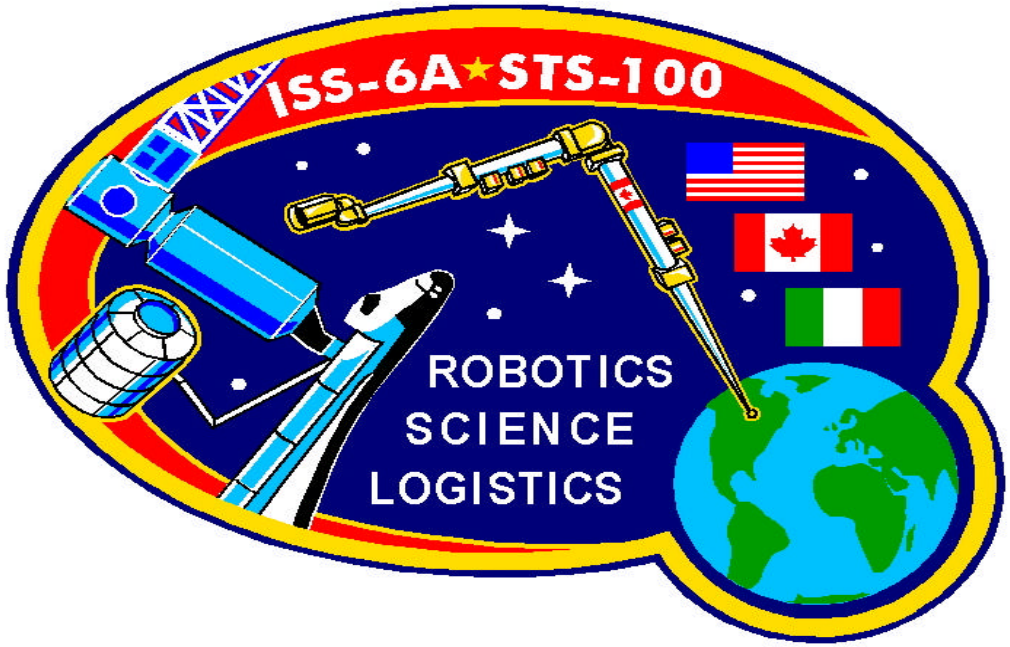
EXPRESS RACK 2			
57202-NA-0013	ER2 Video Exception	03/27/01	Approved OSB
57202-NA-0003B	ARIS ICE Payload Prot	2/2/01	Approved OSB
57202-NA-0004	ARIS ICE Wire Rating Requirement	8/21/00	Approved OSB
57202-NA-0006	Moderate Temperature Loop - Delta T	10/4/00	Approved
57202-NA-0007	ESD for ARIS in ER-2	12/13/00	Approved OSB
52002-010A, 012A, 013A	3 EXP-PCS Human Factors Excs	1/10/01	Approved
57202-NA-0008C	EMI Waiver for RE02 and RS03PL	1/10/01	Approved
57202-NA-0009	Protrusions Request	1/26/01	Approved OSB
57202-NA-0010	HRDL Optical Power Exc.	1/26/01	Approved OSB
57202-NA-0011A	ARIS-ICE H&S Counter	3/6/01	Approved OSB

Compliment Level Exceptions			
57601-NA-0001	6A US Lab Payload Complement Cabin Air Heat Rejection	3/14/01	APPROVED OSB

HRF Radiation Experiments			
57228-NA-0016	HRF Phantom Torso Exceptions to SSP 30237 RE02 EMI Requirement	3/14/01	APPROVED OSB
57228-NA-0017	Editorial Corrections to SSP 57228 Revision A	3/23/01	APPROVED OSB

ISS Configuration Management Office

6A Flight Readiness Review



OL/Alan Lindenmoyer
Manager, Configuration Management

April 05 2001

6A SORR Pending Waivers and Deviations

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 4415	ARIS Waiver for NSPAR Photodetector	Pending	ARIS FCA verification data indicates that ARIS does not meet NSPAR requirements. This waiver will allow the ARIS to be accepted "as is" for the ARIS/EXPRESS configuration (4 units). Related to ARIS FCA AI 683I55AF-009.
SSCN XXXX	Generate Waiver for over weight CTBs on 6A and 7A.1	Pending	Generate Waiver for two single CTBs and one half CTB that exceed the mass limits set in JSC-39207. Theses CTBs are not load bearing.

6A SORR Pending Stage Waiver

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5243	Control System Time Constant Waiver for HRF, EXPRESS, and WORF for stage 6A and subsequent, USL only	Pending	Approve waiver for thermal control system time constant requirement, SSP 57000, paragraph 3.5.1.15. The technical rational for, and constraints imposed by, this waiver are discussed in detail in PIRN 57201-NA-0031A . Payloads employing the use of the Marrotta Scientific valve and controller are not compliant with the above mentioned requirement. This requirement is levied on the payload to ensure the Internal Thermal Control System of the USL remains stable with respect to interface pressure differential and flow rate. Non-compliance results in certain operational restrictions and constraints in order to ensure ITCS stability is maintained.

6A SORR Pending Exceptions

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5263 A	EXCEPTIONS TO ELECTROMAGNETIC EFFECTS (EME) REQUIREMENTS FOR SSP 30237	Pending	This change will incorporate approved requirements tailoring/exceptions initiated by Boeing development sites, NASA GFE, and the Payload Community via the EME Panel.

6A SORR Pending Changes

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 2158	Update to STD Out Document (SOD) Associated Files Required to Accommodate FWC Data Attributes	Pending	Provides for current definitions of the MDM Legal Address file and MDM Device Attributes file that do not provide the ability to collect attributes for Firmware Controllers that are loadable and dumpable to be updated.
SSCN 2177	MPLM On-Orbit Assessment	Pending	To asses the feasibility of leaving the MPLM on-orbit permanently for stowage.
SSCN 2190	Digital Pre-Assembly of Remaining I/Fs	Pending	Perform DPA activities for new Interfaces that are not contracted at this time.
SSCN 3680	Revise SSP 54102-6A Increment Definition and Requirements Document (IDRD) for Planning Period 2 (PP2), Annex 1: Station Manifest, Flight 6A, STS-100: L-10 month timeframe	Pending	Incorporated updates to 6A Manifest Posted for RSA Signature
SSCN 4097	Production Diversion to support ARIS hardware	Pending	This change diverts the ARIS kit hardware originally scheduled for MSRF to be used as flight spares on 6A. A backfill of the hardware used will be provided by the PIO-55 spares delivery.
SSCN 4194 Rev A	Advanced OCA Communications Risk Mitigation Experiment	Pending	Perform flight demonstrations of Advanced OCA Communications capability:
SSCN 4463	ARIS ICE Label Update	Pending	Electric current labels on the ARIS-ICE Payload On-orbit Processor and Shaker Controller will be updated to bring the hardware in compliance with SSP 52000-IDD-ERP.

6A SORR Pending Changes

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 4558	Develop and Deliver Payload Water Reservoir (PWR) to ISS Joint Airlock	Pending	This CR provides payload water reservoirs (PWRs) to the ISS Program for the purpose of water transfer and storage. These items will replace the ISS Airlock collapsible water reservoir (CWR) developed for use on the ISS by the Servicing & Performance Checkout Equipment (SPCE) Project.
SSCN 4652 Rev A	Envelope Drawing Changes for Airlock O2/N2 Components	Pending	The Envelope Drawings changes will be as follows: 683-16419 Add drawing 683-16425, Add test/verification requirements, to Block 16.
SSCN 5023	Update SSP 54102-06A, Rev. A, Increment Definition and Requirements Document (IDRD), for Planning Period 2 (PP2), Annex 1: Station Manifest 6A, STS-100; L-3 Month Time Frame	Pending	Update the manifest, included are: Adding the Lab PCP Duct to 6A Demanifest Video Telecon Hardware and move to UF1, Swap out one IMAX3D Camera Battery; FMK, PDS Content description, Utilization Middeck Allocation, Stowage of Food Containers, Demanifest 2 half CTB's of Expedition 2 U.S. towel/napkin pantry, Add FSE to CSA Spares; Leave Video Telecon equipment on Orbit – demanifest from 6A Add one Orlan Connector Cap and 6A Payload Changes and Adding KURS Hardware to Return Manifest**. Posted for RSA Signature**
SSCN 5135	MPEV CAP REMOVAL.	Pending	This is a standard make operable change (MOC). Update ALENIA drawing 1000P000 (MPLM SYSTEM ASSEMBLY) to include a note for F/N 012 (Hatch/Track Assembly P/N 683-13100-8) which reads: REMOVE MPEV CAP BEFORE FLIGHT. **Posted for ASI Signature**
SSCN 5192	SSP 50417, Integrated experiment hazard assessment generic baseline	Pending	Describes the process for performing an integrated hazard safety assessment for the on-board ISS payload complement. To satisfy Payload Safety Review Panel (PSRP) requirements to perform an integrated analysis to assure the ISS (modules and external accommodations operating with complement of payloads) complies with customer (ISS S&MA & PSRP)-defined Safety requirements. The analysis results shall be documented and presented to the PSRP and Program Management.

6A SORR Pending Changes

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5248	Update SSP54102-06A, Rev A, Increment Definition and Requirements Document (IDRD) for Planning Period 2 (PP2), Annex 1: Staiton Manifest, Flight 6A, STS-100: MPLM late load deliveries	Pending	This change incorporates MRs (6A Payloads PCG-STES adapter cable addition) (ICBC3D payload bay hardware updates for 6A and 7A) (Update water transfer equipment table content (Add VelociCalc Meter (Flight 6A Manifest RS232 Y cable) (Change Part Number for the Passive Dosimeter System) (6A CheCS PDS & FMK Content Clarification) (IATC Coolant Resupply) (US Lab Window Internal Pressure Cover Bag (HDD Module Assembly For Flights 6A & 7A (Move Mace II Return from 5A.1) (6A CheCS Change part number of TOCA (Part Number change for DDCU-1) (Move IMAX3D film & support equipment from 6A MCL to Manifest) (Update Water Transfer Equipment Table Content) (Flight 6A add IP Clamps (Flight 6A Return PCS HD and move 2 CDs from carrying case to Middeck locker)(Demanifest O 2 Latching Motor Valve from 6A, 01-02-116 (Addition and deletion of "R" notes on flight 6A**). Posted for CSA/RSA Signature**
SSCN 5252	Baseline for SSP 54102-04P, Increment Definition and Reqirements Document (IDRD) for Planning Period 2, Annex 1 Station Manifest, Flight 4 Progress M1 (Progress 255)	Pending	A baseline is required to reflect the latest 4 Progress **(4P)** Manifest Inputs from the RSC-E. These inputs were received from or approved by the RSC-E Cargo Flow Engineer on 2March01. These inputs were incorporated in to this CR through MR 01-03-07. **Posted for IP Signature**
SSCN 5268	Provide based camera system (CBCS) International Space Station (ISS) cables for flight 6A	Pending	Provide jumper cable mod kits as required to allow for proper video distribution between the Centerline Based Camera System in the USL to the Robotic Workstation and to the Orbiter in support of flight 6A. This will impact the USL configuration and wiring diagrams. Provide cable drawings, on-orbit installation and revised stage drawings, and mod kit drawings, as applicable.
SSCN 5277	Update EXPRESS Rack Generic PVP Based on PCB Approved CR4340A	Pending	Update EXPRESS Rack PVP (SSP 52000-PVP-ERP, Issue B) Based on the EXPRESS Rack Payload Interface Definition Document (IDD) Issue B Update from PCB Approved CR 4340A.

6A SORR Pending Stage

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5101	Update SSP54102-ANX 3, Increment Definition and Requirements Document (IDRD) for Planning Period 2 (PP2), Annex 3: Station Imagery Increment 2 Stage, 6A, and 7A Tables.	Pending	This change inserts the Annex 3 tables for Flight 6A, 7A, and Increment 2 Stage On-Orbit Imagery Requirements. This CR is required to support the impending resource management and crew training for Increment 2 . **Posted for CSA/RSA/ASI Signatures**

6A Approved Changes Since SORR

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 2291	Baseline SSP 58003 Initial Release, International Space Station Stand-Alone Trainer Specification for Active Rack Isolation System ISS Characterization Experiment (ARIS ICE).	11/08/99	This change will Baseline document.
SSCN 5081 R1	Correction of standard note SN06 Dealing with Surface Coatings on Metal Parts	3/26/01	R1 EFFECTIVITY STS-100 6A Reference FEC-MPLM-062 at http://osprey.ksc.nasa.gov/merb/fec/fec-mplm-062.tif
SSCN 5083 R1	Faying Surface of ELPS Bracket	3/26/01	R1 EFFECTIVITY STS-100 6A R1Reference FEC-MPLM-063 at http://osprey.ksc.nasa.gov/merb/fec/fec-mplm-063.tif
SSCN 5137	Update SSP 54102-06A REV A, Increment Definition and Requirements Document (IDRD), for Planning Period 2 (PP2), Annex 1: Station Manifest, Flight 6A (STS-100), for MPLM late load deliveries	3/19/01	Update manifest parts 4.1-1, 4.2-1, 4.3-1, 4.4-1, and 4.5-1. MRs included in this CR.
SSCN 5227	MPLM Shell MDPS Drawing Implementation	3/26/01	This is a non-standard make operable change (MOC): (1) Modify dwg. 1310P073, PG.1, Rev. B, Detail G1-1 per attachment two of the FEC.(2) Modify dwg. 1310P073, PG.3, Rev. B, Detail I3-3 per attachment one of the FEC.
SSCN 5250	Scuff Plate Screws	3/26/01	Standard Make Operable Change Was: Item 30NAS1153E5 Is: Item 30NAS1153E4 Two 30NAS1153E5 used to attach scuff plate to AFT port trunnion plate bottomed out.
SSCN 5253	Critical Item Approval of the ISS EMU Umbilical (IEU)	3/22/01	Approves the ISS EMU Umbilical (IEU) as a Critical Item for use on the ISS

6A Approved Changes Since SORR

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5261	Revise DCSU Mod Kit DIL Deliveries, Add Mod Kits, and Update Test Procedure	3/29/01 VSIP	Add DCSU modification of the Flight 12A units , the Flight 15A unit in SPEL, and some DDT&E units. Previously definitized SSCN 3246 identified mod kits for the Flight 4A DCSUs and the Flight 6A spare DCSU. This change adds deliveries of the remaining mod kits for the DD250'd DCSU assigned to Flight 15A and the Flight 12A units. (Other DDT&E units are being changed in-line manufacturing and will not require mod kits.) This will also allow the mod kit for the Flight 15A unit to be separately delivered to SPEL for government acceptance by separating that mod kit delivery. 2. Update and release RL01176, Switchgear Control Assembly Confidence Test Procedure, to include a confidence test with the SSCN 3246 approved firmware installed in the Switchgear Control Assembly (SCA).
SSCN 5278	Update EXPRESS Integration Agreement ISS Increment 2 Addendum for PCG-STES to remove Flight 7A Ascent Information	3/29/01 PCB	Update PCG- STES's Increment 2 EIA .
SSCN 5270	Baseline SSP 57300-6A, Human Research Facility (HRF) Software ICD	3/29/01 PCB	Baseline and release Software ICD for Stage6A, as a Non Prime document. Approve and promote HRF Command and Data Handling (C&DH) data set in the Payload Data Library (PDL) to controlled baseline for **stage 6A.**
SSCN 5279	Baseline SSP 57302 Revision A - 6A, EXPRESS Rack 2 Software ICD	3/29/01 PCB	Baseline and release EXPRESS Rack 2 Software ICD for Stage6A, as a Non Prime document. Approve and promote EXPRESS Rack 2 HRF Command and Data Handling (C&DH) data set in the Payload Data Library (PDL) to controlled baseline for **stage 6A.**
SSCN 5280	BASELINE SSP 57301 REVISION A-6A, EXPRESS RACK 1 SOFTWARE ICD	3/29/01 PCB	Baseline and release EXPRESS Rack 1 Software ICD for Stage6A, as a Non Prime document. Approve and promote EXPRESS Rack 1 HRF Command and Data Handling (C&DH) data set in the Payload Data Library (PDL) to controlled baseline for **stage 6A.**

6A Approved Exceptions

CHANGE ID	TITLE	CHANGE AUTH	REMARKS
SSCN 5263	EXCEPTIONS TO ELECTROMAGNETIC EFFECTS (EME) REQUIREMENTS FOR SSP 30237	3/29/01	This change will incorporate approved requirements tailoring/exceptions initiated by Boeing development sites, NASA GFE, and the Payload Community via the EME Panel.